1. (Twice amended) A method of [supplying carbohydrate nutritional supplementation to mammals] enhancing the energy supply of an athlete during exercise and exercise recovery, said method comprising the steps of:

[providing] preparing an aqueous fluid replacement solution comprising [at least one lactic acid salt as a carbohydrate nutritional component of said solution] from about 1 to about 10% w/v of a combination consisting of about 10-20% an inorganic salt of lactic acid and about 90-80% L-arginyl-l(+)-lactate; and

administering said solution [in oral dosage form to a mammalian host in an amount sufficient to beneficially affect the mammal's fluid, electrolyte or carbohydrate balance during exercise and/or subsequent recovery] to said athlete.

2. Cancel.

3. The method [as recited in claim 2] of claim 1, wherein the inorganic lactic acid salt is [at least one member] selected from the group consisting of ammonium lactate, calcium lactate, potassium lactate, sodium lactate and magnesium lactate.

4. Cancel.

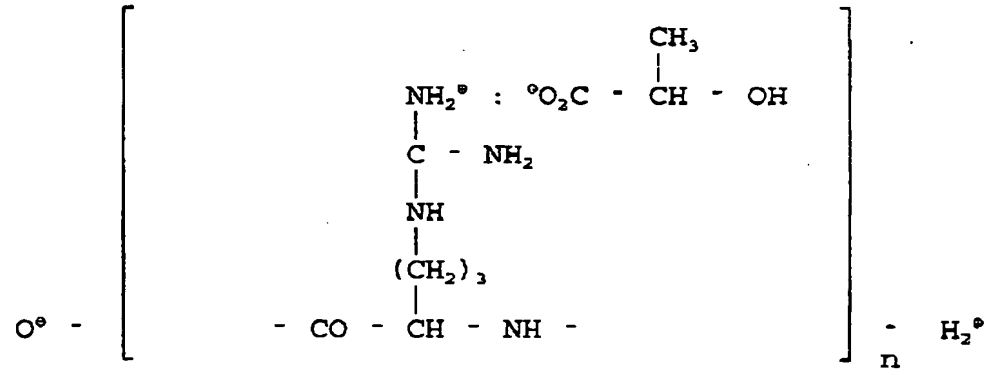
5. Cancel.

6. Cancel.

7. Cancel.

3 ~~8~~. The method [as recited in claim 4] of claim 1, wherein the L-arginyl-l(+)-lactate [organic lactic acid salt] is a polymer.

4 ~~9~~. The method [as recited in] of claim 3 ~~8~~, wherein the [organic lactic acid salt comprises poly(L-Arginyl-L(+)-lactate) having] L-arginyl-l(+)-lactate polymer has the following general structure:



where n > 1.

~~10~~. Cancel.

5 ~~11~~. The method [as recited in] of claim 1, wherein the aqueous solution additionally [consists of] comprises simple or complex carbohydrates [in amounts sufficient to improve the energy supply of the mammal].

6 ~~12~~. The method [as recited in] of claim 5 ~~11~~, wherein the simple carbohydrate is glucose or fructose.

7 ~~13~~. The method [as recited in] of claim 5 ~~11~~, wherein the complex carbohydrate is [at least one member] selected from the group consisting of glucose polymers from five to ten monomeric units.

PATENT

~~14~~. (Twice Amended) A fluid replacement solution [A carbohydrate nutritional supplement for restoring a mammal's fluid, electrolyte and carbohydrate balance during exercise and subsequent recovery] comprising:

an aqueous solution [comprising at least one lactic acid salt as a nutritional component of said solution in an amount sufficient to beneficially affect the mammal's fluid, electrolyte or carbohydrate balance during exercise and/or subsequent recovery, wherein said solution comprises] including a combination consisting of:

a) from about 10-20% of an [at least one] inorganic lactic acid salt [wherein the inorganic lactic acid salts are in a final solution concentration of up to approximately 0.2 weight percent]; and

b) from about 90-80% of a lactate formed from L(+)-lactate anion and at least one member selected from the group consisting of cations of L isomeric forms of basic amino acids [at least one organic lactic acid salt];

wherein the total amount of said inorganic lactic acid salt and said lactate is [organic lactic acid salts are] from about 1 to about 10% w/v of said aqueous solution [in a final solution concentration of from approximately 0.36 to 9.8 weight percent].

D5 cont.

~~17~~ 9. (Amended) The solution of [supplement as recited in claim 15] claim ~~14~~ 8 wherein the inorganic lactic acid salt is [at least one member] selected from the group consisting of ammonium lactate, calcium lactate, potassium lactate, sodium lactate and magnesium lactate.

~~D7~~ D6

~~18~~. Cancel.

C

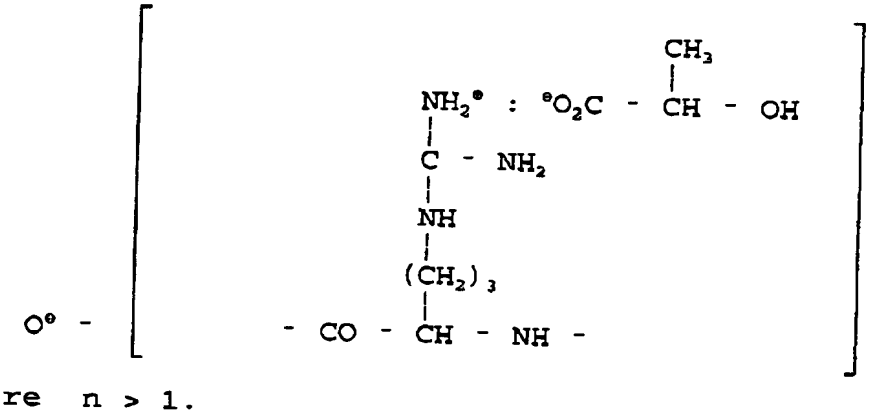
21

10 ~~19~~. (Amended) The [supplement as recited in claim 18] solution of claim 8 ~~14~~, wherein the basic amino acid is [at least one member] selected from the group consisting of L-Arginine, L-Histidine and L-Lysine.

11 ~~20~~. (Amended) The [supplement as recited in claim] solution of claim 10 ~~19~~, wherein the lactate is [organic lactic acid salt comprises] L-Arginyl-L(+)-lactate.

12 ~~21~~. (Amended) The [supplement as recited in claim 8 ~~14~~, wherein the organic lactic acid salt] solution of claim 8 ~~14~~ wherein said lactate is a polymer.

13 ~~22~~. (Amended) The [supplement as recited in claim 21, wherein the organic lactic acid salt] solution of claim 12 ~~21~~ wherein said polymer comprises poly(L-Arginyl-L(+)-lactate) having the following general structure:



where $n > 1$.

14
~~23~~. (Amended) The [supplement as recited in claim 14, wherein the] said aqueous solution further comprises simple or complex carbohydrates [in amounts sufficient to improve the energy supply of the mammal].

15
~~24~~. (Amended) The [supplement as recited in claim] solution of claim 14 ~~23~~, wherein the simple carbohydrate is glucose or fructose.

16
~~25~~. (Amended) The [supplement as recited in] solution of claim 14 ~~23~~, wherein the complex carbohydrate is at least one member selected from the group consisting of glucose polymers of from five to ten monomeric units.

17
~~26~~. (Amended) The [supplement as recited in] solution of claim 14 ~~23~~, wherein the simple or complex carbohydrate components are in accordance with the following dosages:

[c)] Mono- and Disaccharide simple carbohydrates in a final concentration of from approximately 0.4 to 2.0 weight percent; and

[d)] Polysaccharide complex carbohydrates in a final concentration of from approximately 0.8 to 4.0 weight percent.

REMARKS

Entry and of this amendment and consideration of applicants claims as amended are respectfully requested. Claims 1, 3, 8, 9, 11-14, 17 and 19-26 and 28 are now pending.

Support for the amended claims is found as follows:

New claim 28 is directed to the composition described in example 2.